

=> d que stat l32

L1 1 SEA FILE=REGISTRY ABB=ON "SODIUM BICARBONATE"/CN  
 L2 1 SEA FILE=REGISTRY ABB=ON SODIUM SULPHATE/CN  
 L3 1 SEA FILE=REGISTRY ABB=ON AMMONIUM CHLORIDE/CN  
 L4 1 SEA FILE=REGISTRY ABB=ON CALCIUM CHLORIDE/CN  
 L5 0 SEA FILE=REGISTRY ABB=ON SODIUM HYDROGEN PHOSPHATE/CN  
 L6 2 SEA FILE=REGISTRY ABB=ON ("SODIUM HYDROGEN PHOSPHATE (NA2H2P2O7)"/CN OR "SODIUM HYDROGEN PHOSPHATE (NAH2PO4)"/CN)  
 L7 4 SEA FILE=REGISTRY ABB=ON ("POTASSIUM HYDROGEN PHOSPHATE (K2H2P2O7)"/CN OR "POTASSIUM HYDROGEN PHOSPHATE (K2HPO4)"/CN OR "POTASSIUM HYDROGEN PHOSPHATE (K3HP2O7)"/CN OR "POTASSIUM HYDROGEN PHOSPHATE (KH2PO4)"/CN)  
 L8 1 SEA FILE=REGISTRY ABB=ON "POTASSIUM CHLORIDE"/CN  
 L9 1 SEA FILE=REGISTRY ABB=ON "AMMONIUM SULPHATE"/CN  
 L10 995 SEA FILE=HCAPLUS ABB=ON ?COLLAGEN?(W) (?CASING? OR ?CONTAIN?)  
 L11 62 SEA FILE=HCAPLUS ABB=ON L10 AND (?FOOD? OR ?FEED?)  
 L12 1 SEA FILE=HCAPLUS ABB=ON L11 AND (?CLIP?(3A) (?STRENGTH? OR ?STRONG?) OR ?THICK?)  
 L13 3 SEA FILE=HCAPLUS ABB=ON L11 AND (?COOK? OR ?BAKE? OR ?BOIL? OR ?BROIL?) (L) (?RESIST? OR ?LESS? OR ?RESTRICT? OR ?BARRIER?)  
 L14 37 SEA FILE=HCAPLUS ABB=ON L11 AND (?SOAK? OR DRY? OR ?DRIED? OR ?AQUEOUS? OR ?WATER? OR ?LIQUID?)  
 L15 37 SEA FILE=HCAPLUS ABB=ON L12 OR L13 OR L14  
 L16 37 SEA FILE=HCAPLUS ABB=ON L15 AND (?PACK? OR ?CONTAIN? OR ?HOLD? OR ?SECURE?)  
 L17 4 SEA FILE=HCAPLUS ABB=ON L15 AND (?PACK? OR ?HOLD?)  
 L18 37 SEA FILE=HCAPLUS ABB=ON L16 OR L17  
 L19 12 SEA FILE=HCAPLUS ABB=ON L18 AND (?COMPOSIT? OR ?FORMULAT?)  
 L20 7 SEA FILE=HCAPLUS ABB=ON L18 AND (?METHOD? OR ?TECHNIQ?)  
 L21 37 SEA FILE=HCAPLUS ABB=ON L18 OR L19 OR L20  
 L22 33 SEA FILE=HCAPLUS ABB=ON L21 AND (PD<20021115 OR PRD<20021115)  
 L24 1032 SEA FILE=HCAPLUS ABB=ON ?COLLAGEN? AND (L1 OR L2 OR L3 OR L4 OR L5 OR L6 OR L7 OR L8 OR L9 OR (?SODIUM? OR NA) (W) (?BICARBONATE? OR ?SULPHAT? OR ?SULFAT?) OR (?AMMONIUM? OR NH4 OR ?CALCIUM? OR CA OR ?POTASSIUM?) (W) (?CHLORIDE? OR CL) OR (?SODIUM? OR NA OR ?POTASSIUM?) (W) (?HYDROGEN?) (W) (?PHOSPHAT?))  
 L25 564 SEA FILE=HCAPLUS ABB=ON L24 AND (?CASING? OR ?CONTAIN?)  
 L26 27 SEA FILE=HCAPLUS ABB=ON L25 AND (?FOOD? OR ?FEED?)  
 L27 1 SEA FILE=HCAPLUS ABB=ON L26 AND (?CLIP?(3A) (?STRENGTH? OR ?STRONG?) OR ?THICK?)  
 L30 60 SEA FILE=HCAPLUS ABB=ON L22 OR L26 OR L27  
 L32 32 SEA FILE=HCAPLUS ABB=ON L30 AND (?COMPOSIT? OR ?FORMULAT? OR ?METHOD? OR ?TECHNIQ?)

=> d ibib abs l32 1-32

L32 ANSWER 1 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2004:769610 HCAPLUS  
 TITLE: **Method for preparing collagenase**  
 INVENTOR(S): Isaev, V. A.; Shmoilov, A. M.; Rudenskaya, G. N.; Zhantiev, R. D.  
 PATENT ASSIGNEE(S): Zakrytoe Aktsionernoe Obshchestvo Nauchno-Proizvodstvennoe Predpriyatie "Trinita", Russia  
 SOURCE: Russ., No pp. given  
 CODEN: RUXXE7  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Russian  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2236460	C1	20040920	RU 2003-114709	20030520
PRIORITY APPLN. INFO.:			RU 2003-114709	20030520

AB FIELD: biotechnol., preparative biochem. SUBSTANCE: invention can be used in medicine, cosmetol., dermatol., biochem. and **food** industry and in investigation aims also. **Method** for preparing the **collagenase** preparation involves homogenization of the parent **collagen-containing** raw, separation of extract by centrifugation, chromatog. purification on ion-exchange resin and the following elution of active fraction, dialysis of eluate and lyophilic drying the final preparation As the parent **collagenase-containing** raw **method** involves using skin beetle larvae of genus Dermestes. Homogenization is carried out in sodium chloride solution with addition of sodium azide in the volume ratio of biomass to solution = 1:(2-2.5). Chromatog. purification is carried out on DEAE-Sepharose column equilibrated with MES-buffer with addition of 0.005 M of **calcium chloride** and elution is carried out with Tris-buffer with addition of sodium chloride, **calcium chloride** and Et alc. Invention provides high yield of **collagenase**, enhanced specific activity of enzyme by 5-10 times and reduces the process time for prep. EFFECT: improved preparing **method**. 4 dwg, 2 ex.

L32 ANSWER 2 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2004:392086 HCAPLUS  
 DOCUMENT NUMBER: 140:390638  
 TITLE: Starch/**collagen casings** for co-extruded **food** products such as sausage.  
 INVENTOR(S): Joly, Ghislaine; Kasica, James J.; O'Mara, Robert; Shariff, Roxanna  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 12 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004091581	A1	20040513	US 2002-291888	20021108
JP 2004159656	A2	20040610	JP 2003-372091	20031031 <--
DE 10351965	A1	20040527	DE 2003-10351965	20031107 <--
NL 1024737	A1	20040709	NL 2003-1024737	20031107 <--
PRIORITY APPLN. INFO.:			US 2002-291888	A 20021108 <--

AB **Composites** or combinations of selected starches and collagen provide very useful casing materials for co-extruded **food** products such as sausage. The casing material includes collagen and a) a gel forming, non-degraded, amylose **containing** dispersed starch, or b) a gel forming, non-degraded, chemical crosslinked or phys. inhibited amylopectin dispersed starch, wherein the starch in a) or b) is characterized by a G' of 600 Pa or greater at a frequency of 0.1 rad/s at 25° C. provided the starch is prepared at a solid concentration of 10 weight %, the amount of starch to collagen being from about 0.05:1 to 10:1 parts by weight on a **dry** basis.

L32 ANSWER 3 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2004:331889 HCAPLUS  
 DOCUMENT NUMBER: 140:338290

TITLE: **Methods and compositions for**  
providing glutamine supplements to humans, especially  
in disease prevention and treatment.

INVENTOR(S): Baxter, Jeffrey H.; Lopez, Jose Maria; Rueda, Ricardo

PATENT ASSIGNEE(S): Abbott Laboratories, USA

SOURCE: PCT Int. Appl., 72 pp.  
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004032653	A1	20040422	WO 2002-US32172	20021008
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR			

PRIORITY APPLN. INFO.: US 2002-973105 A 20021008

AB **Methods** and comps. for providing glutamine supplementation to a human comprise orally administering an effective amount of N-acetyl-L-glutamine or a nutritionally acceptable salt thereof. The N-acetyl-L-glutamine or a nutritionally acceptable salt thereof can be incorporated into any liquid **composition** that is suitable for human consumption. Examples of suitable comps. include aqueous solns. such as for use as oral rehydration solns. and liquid nutritional formulas (including enteral formulas, oral formulas, formulas for adults, formulas for children and formulas for infants). The quantity of N-acetyl-L-glutamine or nutritionally acceptable salt thereof can vary widely but typically, these comps. will **contain** sufficient N-acetyl-L-glutamine or a nutritionally acceptable salt thereof to provide at least 140 mg of total glutamine per kg of body weight per day.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 4 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:610154 HCAPLUS

DOCUMENT NUMBER: 139:148793

TITLE: **Method** for preparing a blood plasma powder and uses thereof

INVENTOR(S): Roodink, Hendrikus Bernardus Johannes; Zuijdweg, Paul

PATENT ASSIGNEE(S): Harimex B.V., Neth.

SOURCE: PCT Int. Appl., 18 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003063607	A1	20030807	WO 2003-NL56	20030128
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,			

LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,  
 PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,  
 UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,  
 RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,  
 CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,  
 NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,  
 ML, MR, NE, SN, TD, TG

NL 1019873 C2 20030804 NL 2002-1019873 20020131

EP 1469740 A1 20041027 EP 2003-701945 20030128

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

PRIORITY APPLN. INFO.:

NL 2002-1019873 A 20020131

WO 2003-NL56 W 20030128

AB The present invention relates to a **method** for preparing a blood  
 plasma powder, in which (1) a fibrinogen concentrate having a fibrinogen  
 content

of at least 1 percent by weight is prepared from blood plasma, and in that (2)  
 said fibrinogen concentrate is spray-dried to form a powder, apparently  
 intended

for use in **foods**, in such a manner that the temperature of the  
 fibrinogen itself is maintained at less than 60°C. Furthermore,  
 the invention relates to a **method** for bonding together pieces of  
**foodstuff** and to a **method** for increasing the consistency  
 of a liquid or semi-solid **foods**.

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 5 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:413885 HCAPLUS

DOCUMENT NUMBER: 139:6171

TITLE: N-Acetyl-L-glutamine in nutritional  
**compositions**

INVENTOR(S): Baxter, Jeffrey H.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 27 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003099722	A1	20030529	US 2001-973105	20011009
US 2003134851	A1	20030717	US 2002-266317	20021008
US 2004081708	A1	20040429	US 2003-623194	20030718

PRIORITY APPLN. INFO.: US 2001-973105 A2 20011009

AB Glutamine supplementation in humans is attained by orally administering an  
 effective amount of N-acetyl-L-glutamine or its salt. The  
 N-acetyl-L-glutamine or its salt can be incorporated into any liquid  
**composition** that is suitable for human consumption. Examples include  
 oral rehydration solns. and liquid nutritional formulas (including enteral  
 formulas, oral formulas, formulas for adults, formulas for children and  
 formulas for infants). The quantity of N-acetyl-L-glutamine or  
 nutritionally acceptable N-acetyl-L-glutamine salt may vary widely but,  
 typically, the compns. **contain** sufficient N-acetyl-L-glutamine  
 or salt to provide at least 140 mg of total glutamine per kg body weight per  
 day. Thus, a ready-to-feed liquid flavored product  
**contains** (per 1000 kg): 77.88 kg maltodextrin, 52.80 kg sucrose,

30.11 kg soy protein hydrolyzate, 10.03 kg N-acetyl-L-glutamine, plus mineral nutrients, vitamins, and other ingredients.

L32 ANSWER 6 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2003:254270 HCAPLUS  
 DOCUMENT NUMBER: 138:254224  
 TITLE: **Methods** for processing of shark skin and manufacture of **collagen**  
 INVENTOR(S): Watanabe, Kaiji  
 PATENT ASSIGNEE(S): Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003092997	A2	20030402	JP 2001-290201	20010921
PRIORITY APPLN. INFO.:			JP 2001-290201	20010921
AB Shark skin is treated with Na <sub>2</sub> S or NaOH, treated with Ca(OH) <sub>2</sub> , washed with H <sub>2</sub> O, treated with (NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub> and NaCl, immersed in an aqueous solution containing HCl or AcOH and NaCl, washed with H <sub>2</sub> O, and immersed in H <sub>2</sub> O. Scales are removed from the processed shark skin, and <b>collagen</b> is extracted from the skin. Undenatured <b>collagen</b> of high purity can be obtained.				

L32 ANSWER 7 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2003:202391 HCAPLUS  
 DOCUMENT NUMBER: 138:204049  
 TITLE: Coextrusion of **food** products with curable coatings  
 INVENTOR(S): Kobussen, Jacobus Petrus Johannes  
 PATENT ASSIGNEE(S): KTC Beheer B.V., Neth.  
 SOURCE: PCT Int. Appl., 17 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003020045	A1	20030313	WO 2002-NL563	20020827
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
NL 1018871	C2	20030305	NL 2001-1018871	20010903
EP 1424905	A1	20040609	EP 2002-753302	20020827
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				

## PRIORITY APPLN. INFO.:

NL 2001-1018871

A 20010903

WO 2002-NL563

W 20020827

AB A **method** for preparing an extruded **food** product comprises the steps of (i) simultaneously co-extruding the **food** product and a curable coating on the outer surface of the **food** product; (ii) passing the **food** product that has been subjected to the co-extruding step in step (i) through a coagulation bath; and (iii) subjecting the **food** product from step (ii) to further treatment. Thus, deacetylated chitin may be co-extruded with **collagen**; dipotassium phosphate may be used in the coagulation bath; and the extruded sausage strand may be washed with water to remove salts still present on the surface without the **casing** disintegrating or being remoisturized.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 8 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:741454 HCAPLUS

DOCUMENT NUMBER: 137:351986

TITLE: **Food** product obtained by hydrolysis of **collagen-containing** skin

INVENTOR(S): Ermishina, I. G.; Breslavskii, V. P.

PATENT ASSIGNEE(S): Russia

SOURCE: Russ., No pp. given

CODEN: RUXXE7

DOCUMENT TYPE: Patent

LANGUAGE: Russian

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2181009	C1	20020410	RU 2000-120781	20000810 <--
			RU 2000-120781	20000810 <--

## PRIORITY APPLN. INFO.:

AB A protein-derived **food** product is obtained by enzymic hydrolysis of **collagen-containing** material (e.g., from cattle or swine) and includes a complete amino acid **composition**, polypeptides, **water-** and fat-soluble vitamins, trace minerals, and residual moisture. The skin-to-**water** weight ratio for hydrolysis is from 0.35:1 to 0.6:1. Hydrolysis is carried out at 42-49° and pH 7.8-8.0 for 7-10 h. The unhydrolyzed portion is then precipitated at pH 7.4-7.5 and 80-95°. Thus, the product may **contain** amino acids 30-50; di-, tri-, and tetrapeptides 35-55; polypeptides (≤2000 daltons) 11-16; polypeptides (>2000 daltons) 0.05-0.9; vitamins 0.05-0.9; trace elements 0.05-0.5; and **water** 2-7%.

L32 ANSWER 9 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:591669 HCAPLUS

DOCUMENT NUMBER: 137:154384

TITLE: Symbiotic regenerative **compositions** **containing** microorganisms

INVENTOR(S): Schuer, Joerg-Peter

PATENT ASSIGNEE(S): Germany

SOURCE: Eur. Pat. Appl., 25 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1228769	A1	20020807	EP 2001-102384	20010202
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
WO 2002067986	A2	20020906	WO 2002-EP1056	20020201
WO 2002067986	A3	20031211		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1390071	A2	20040225	EP 2002-712882	20020201
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 2004076614	A1	20040422	US 2003-467040	20031204
PRIORITY APPLN. INFO.:				
			EP 2001-102384	A 20010202
			WO 2002-EP1056	W 20020201
AB The invention concerns regenerative drugs, dietary supplements, feed additives that <b>contain</b> microorganisms and modulating substances, e.g. enzymes, GRAS (Generally Recognized As Safe) aromas, plant exts. Further the compns. <b>contain</b> vitamins, minerals, growth promoters, carrier substances, etc. Microorganisms are a-pathogenic, pathogenic or facultative pathogenic,.				
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT				
L32 ANSWER 10 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN				
ACCESSION NUMBER: 2002:439303 HCAPLUS				
DOCUMENT NUMBER: 137:46451				
TITLE: Collagen hydrolyzate (Kollamin) <b>food</b> additive preparation from natural raw materials				
INVENTOR(S): Ermishina, I. G.; Kapitskii, Yu. E.				
PATENT ASSIGNEE(S): Russia				
SOURCE: Russ., No pp. given				
CODEN: RUXXE7				
DOCUMENT TYPE: Patent				
LANGUAGE: Russian				
FAMILY ACC. NUM. COUNT: 1				
PATENT INFORMATION:				

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2169473	C1	20010627	RU 2000-120780	20000810 <--
PRIORITY APPLN. INFO.:			RU 2000-120780	20000810 <--
AB The <b>method</b> involves preparing a <b>food</b> additive from natural balanced raw materials. The <b>food</b> additive Kollamin is an enzymic hydrolyzate of <b>collagen-containing</b> tissues <b>containing</b> amino acids, polypeptides, <b>water-soluble</b> and fat-soluble vitamins, trace elements and residual moisture. Based on Kollamine, nutrient medium is prepared This medium has sodium chloride, lactose, agar-agar and purified <b>water</b> that is used for culturing bifidobacteria or lactobacilli. The ready product has 1 x 10 <sup>8</sup> - 1 x 10 <sup>9</sup> viable cells. The product is enriched with biol. active polypeptides with				

mol. mass below and above 2000 Da, trace elements, organic and unsatd. fatty acids.

L32 ANSWER 11 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:409252 HCAPLUS

DOCUMENT NUMBER: 137:2747

TITLE: **Method** for producing dehydrated biologically active products in particulate form

INVENTOR(S): Schilling, Marvin L.; Fafard, Richard D.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 8 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002065231	A1	20020530	US 2001-964120	20010925
WO 2003027232	A2	20030403	WO 2002-US28856	20020912
WO 2003027232	A3	20030814		
W:	AT, AU, CA, CN, DE, DK, GB, IL, JP, NZ, PT, SE, TR, ZA			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR			
EP 1435906	A2	20040714	EP 2002-799577	20020912
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR, BG, CZ, EE, SK			

PRIORITY APPLN. INFO.:  
US 2000-237005P P 20000929  
US 2001-964120 A 20010925  
WO 2002-US28856 W 20020912

AB The present invention relates to a process for dehydrating naturally occurring organic materials which **contain** a biol. active component, and in particular proteins such as **collagens**, which does not change the original structure of the active component. The process consists of drying such material in particulate form in the presence of an antimicrobial agent and preferably an ionizable salt, such as sodium or **potassium chloride**, at temps. at or below which denaturization occurs until the water content of the material is reduced to <15%. After processing the naturally occurring materials may be used as a dietary supplement, herbal medicines, ingested or topical therapeutic agents, or as an antimicrobial agent added to surgical dressings.

L32 ANSWER 12 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:327832 HCAPLUS

DOCUMENT NUMBER: 136:309010

TITLE: Protein-based thermoplastic chewable pet toy

INVENTOR(S): Wang, Shu Huan; Chen, Cheng-Wen

PATENT ASSIGNEE(S): Natural Polymer International Corporation, USA

SOURCE: U.S., 11 pp., Cont.-in-part of U.S. 5,922,379.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6379725	B1	20020430	US 1998-145659	19980902
CN 1115966	B	20030730	CN 1999-805790	19990414



WO 2000013521 A1 20000316 WO 1999-US9397 19990430  
 W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,  
 DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,  
 JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,  
 MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,  
 TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD,  
 RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,  
 ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,  
 CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
 AU 9937737 A1 20000327 AU 1999-37737 19990430  
 EP 1124434 A1 20010822 EP 1999-920177 19990430  
 R: DE, FR, GB, IT  
 JP 2002524062 T2 20020806 JP 2000-568336 19990430  
 TW 522153 B 20030301 TW 1999-88106335 19990503  
 US 6455083 B1 20020924 US 1999-467412 19991220  
 PRIORITY APPLN. INFO.:  
 US 1998-72857 A2 19980505  
 US 1998-145659 A 19980902  
 WO 1999-US9397 W 19990430

AB Chewable pet toys are made from protein-based thermoplastic compn  
 . **containing** plant- and animal-derived protein material and various  
 additive and nutrient ingredients. The chewable pet toys possess  
 properties of conventional artificial dog bones made of synthetic polymer,  
 such as good strength and hardness, but they are biodegradable and edible.  
 In addition, the chewable pet toys **contain** vitamins, minerals,  
 flavorings, oral hygiene additives and other ingredients to help keep  
 teeth and bones strong and to promote the growth and health of the pet.  
 Thus, soy protein and gluten may be used as sources of plant protein;  
 gelatin and casein as sources of animal protein; and glycerol as an edible  
 plasticizer for injection-molded items.

REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 13 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:581670 HCAPLUS

DOCUMENT NUMBER: 135:136698

TITLE: Improved pediatric formula and **methods** for  
 providing nutrition and improving tolerance

INVENTOR(S): Borschel, Marlene W.; Luebbers, Steven T.; Black,  
 Cynthia J.; Mckamy, Daniel L.; Costigan, Timothy

PATENT ASSIGNEE(S): Abbott Laboratories, USA

SOURCE: PCT Int. Appl., 36 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001056406	A1	20010809	WO 2001-US1295	20010116
W: AU, BG, BR, CA, CN, CZ, HU, IL, JP, KR, MX, NO, NZ, PL, RO, SI, SK, TR				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
US 6365218	B1	20020402	US 2000-498350	20000204
BR 2001006681	A	20020430	BR 2001-6681	20010116
EP 1251750	A1	20021030	EP 2001-948924	20010116
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR				

SI 21018	C	20030430	SI 2001-20017	20010116
JP 2003521501	T2	20030715	JP 2001-556112	20010116
NO 2002003684	A	20021002	NO 2002-3684	20020802
BG 107019	A	20030430	BG 2002-107019	20020820
PRIORITY APPLN. INFO.:			US 2000-498350	A 20000204
			WO 2001-US1295	W 20010116

AB The present invention provides an improved pediatric formula and **methods** for providing nutrition to and enhancing tolerance in pediatric patients. The formula may be provided in powder, concentrate or ready-to-feed forms. The pediatric formula comprises, based on a 100 kcal basis, about 8 to about 16 g carbohydrate (preferably about 9.4 to about 12.3 g), about 3 to about 6 g lipid (preferably about 4.7 to about 5.6 g), about 1.8 to about 3.3 g protein (preferably about 2.4 to about 3.3 g), and a tolerance improver comprising about 37 to about 370 mg (preferably about 74 to about 222 mg, more preferably about 111 to about 148 mg) xanthan gum. The formula may also be provided in a powder, which comprises, based on 100 g of powder, about 30 to about 90 g carbohydrate (preferably about 48 to about 59 g), about 15 to about 30 g lipid (preferably 22 to about 28 g), about 8 to about 17 g protein (preferably about 11 to about 17), and about 188 to about 1880 mg (preferably about 375 to about 1125, more preferably about 375 to about 1125 mg) xanthan gum. The formula preferably further comprises vitamins and minerals and may further comprise a stabilizer. The **methods** comprise administering to a pediatric patient an effective amount of a pediatric formula according to the invention, as described above.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 14 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:516085 HCAPLUS

DOCUMENT NUMBER: 135:106651

TITLE: Cooking of meat with microwave after homogenization and gelation and restaurant system using the **method**

INVENTOR(S): Katayama, Taro

PATENT ASSIGNEE(S): Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001190247	A2	20010717	JP 2000-3064	20000111
PRIORITY APPLN. INFO.:			JP 2000-3064	20000111

AB Meat or fish and shellfish meat is soaked in a high-concentration salt solution (preferably 0.1-7.0 mol/kg) and a high-concentration solution of alkaline agents

(preferably 0.01-4.0 mol/kg) for gelation and irradiated with microwave. The process converts sarcolemma, cells, and **collagens** into myofibrils by salting-in action, and the myofibrils are further emulsified by addnl. action of body fluid and phospholipids while meat juice and body fluid are gelated, thus making the muscular tissue homogeneous. Cooking such a homogenized meat with microwave uniformly heats the tissue without losing umami. The **method** can be applied to seasoned chilled meat, seasoned frozen meat, or thawed meat. Also claimed is a restaurant system by cooking **food** using the above **method** and serving the **food** in a short time. A NaCl solution (6 mol/kg) and

NaHCO<sub>3</sub> solution (1 mol/kg ) **containing** vitamin E, vitamin C, sorbic acid, and Na glutamate were injected into frozen round, tumbled for 15 min, and cured at 5° for 24 h. The round was seasoned with NaCl and pepper, broiled for 2 min, and then frozen. The frozen meat was cooked by a microwave oven for 3 min to give soft and juicy steak.

L32 ANSWER 15 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:861432 HCAPLUS  
 DOCUMENT NUMBER: 134:4253  
 TITLE: Immobilized lactoferrin (Im-LF) antimicrobial agents and uses thereof  
 INVENTOR(S): Naidu, A. Satyanarayan  
 PATENT ASSIGNEE(S): USA  
 SOURCE: PCT Int. Appl., 52 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000072690	A2	20001207	WO 2000-US14818	20000526
WO 2000072690	A3	20010510		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
US 6172040	B1	20010109	US 1999-322700	19990528
BR 2000011558	A	20020226	BR 2000-11558	20000526
EP 1181044	A2	20020227	EP 2000-937923	20000526
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
JP 2003500425	T2	20030107	JP 2000-620811	20000526
BR 2000011021	A	20030429	BR 2000-11021	20000526
AU 776657	B2	20040916	AU 2000-53035	20000526
PRIORITY APPLN. INFO.:			US 1999-322700 A 19990528	
			WO 2000-US14818 W 20000526	

AB Disclosed is a **composition** of matter comprising a defined dispersion of lactoferrin immobilized on a naturally occurring substrate via the N-terminus region of the lactoferrin. Compns. comprising immobilized lactoferrin (Im-LF) are used in a **method** for reducing the microbial contamination of a **composition** subject to microbial contamination, which is also disclosed, and which encompasses a **method** for reducing the microbial contamination of a **food**, such as a meat product. **Foods** treated by the **method** are disclosed, including meat products. A **method** of inhibiting the growth and/or adhesion of a microbial species on a **food**-contacting surface of a material for **food** packaging or **food** handling with Im-LF is also disclosed. **Food containers** and **food**-handling implements so treated are also disclosed, as are antimicrobial cleansers, polishes, paints, sprays, soaps, or detergents **containing** Im-LF for applying to an inanimate surface.

L32 ANSWER 16 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2000:384859 HCAPLUS  
 DOCUMENT NUMBER: 133:152218  
 TITLE: Useful protein residues from a new tanning process  
 with low water consumption (Xipe process)  
 AUTHOR(S): Lopez, Andrea C.; Plata, Maria T.; Del Cueto, Eusebio;  
 Leal, Hermilo; Valdivia, Maria De Los A.  
 CORPORATE SOURCE: Depto. Alimentos y Biotecnologia, Facultad de Quimica,  
 Universidad Nacional Autonoma de Mexico, Mexico City,  
 Mex.  
 SOURCE: Revista de la Sociedad Quimica de Mexico (1999),  
 43(5), 165-170  
 CODEN: RSQMAN; ISSN: 0583-7693  
 PUBLISHER: Sociedad Quimica de Mexico  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Spanish  
 AB A hide conditioning process (Xipe process) was developed for extraction of fat  
 and proteinaceous materials from raw hides prior to chrome tanning. The  
 process comprises treatment with saline solns. and NaOH and HCl solns.,  
 requires min. amount of water, and the effluents **contain** useful  
 materials that can be recovered to minimize pollutant discharge. Low cost  
**feedstocks**, e.g., rockfish hide and chicken feet hide were treated  
 using the Xipe **method**. The main protein recovered by precipitation with  
 (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub> from the liquid exts. is **collagen** of 575,440 D mol. weight,  
 as determined by size exclusion chromatog. Various amino acids were identified  
 in the protein fraction, e.g., glycine, proline, and hydroxyproline which  
 together with alanine are the main components of **collagen**. The  
**collagen** has great potential for use the **food** and  
 cosmetic industries.  
 REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 17 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2000:351319 HCAPLUS  
 DOCUMENT NUMBER: 132:333710  
 TITLE: **Method** for covering a **food** product  
 with collagen  
 INVENTOR(S): Moeller, Patrick W.  
 PATENT ASSIGNEE(S): Hickory Specialties, Incorporated, USA  
 SOURCE: PCT Int. Appl., 19 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000028837	A1	20000525	WO 1999-US15909	19990714 <--
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
CA 2351540	AA	20000525	CA 1999-2351540	19990714 <--
AU 9951013	A1	20000605	AU 1999-51013	19990714 <--

AU 759935 B2 20030501  
 BR 9915442 A 20010807 BR 1999-15442 19990714 <--  
 EP 1130978 A1 20010912 EP 1999-935556 19990714 <--  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO  
 JP 2002529109 T2 20020910 JP 2000-581898 19990714 <--  
 NZ 511985 A 20021220 NZ 1999-511985 19990714 <--  
 US 2001022985 A1 20010920 US 2001-852172 20010509 <--  
 US 6541053 B2 20030401

PRIORITY APPLN. INFO.: US 1998-193694 A 19981117 <--  
 WO 1999-US15909 W 19990714 <--

AB A collagen processing method is presented for thickening or hardening the collagen sufficiently, by application of a liquid smoke fraction obtained from a liquid smoke derivative (a derivative being com. available as Code V), so that the resultant treated collagen is useful as a casing for a food product. The liquid smoke fraction may be obtained by treating Code V with both carbon and a pH adjustment whereby the method is without an effect on the taste of the food product. In another embodiment, the Code V is only pH adjusted.

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 18 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:268514 HCAPLUS

DOCUMENT NUMBER: 132:264429

TITLE: Brine formulation for curing extruded sausage strand

INVENTOR(S): Kobussen, Jaap; Kobussen, Mart; Kobussen, Jos; Alexander, David

PATENT ASSIGNEE(S): Townsend Engineering Company, USA

SOURCE: U.S., 7 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6054155	A	20000425	US 1997-990619	19971215
CA 2274960	C	20031111	CA 1998-2274960	19981211
US 6153234	A	20001128	US 1999-287719	19990407
MX 9907532	A	20000630	MX 1999-7532	19990813

PRIORITY APPLN. INFO.: US 1997-990619 A 19971215  
 WO 1998-US26468 W 19981211

AB In a method for coagulating a co-extruded collagen gel on a food product (e.g., sausages), a highly soluble salt (solubility  $\geq 8$  mol/L at 20°) is applied to the collagen gel and the collagen gel is coagulated in <60 s. The collagen gel is acidified with an inorg. acid such as hydrochloric or sulfuric acid and has a dry matter of 3-25%. Thus, the salt used in the coagulation solution may be potassium carbonate or dipotassium phosphate.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 19 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:260088 HCAPLUS

DOCUMENT NUMBER: 132:278461

TITLE: Apparatus and chemical composition for

maintaining atmospheric humidity to preserve  
**foods**  
 INVENTOR(S): Fuller, Peter E.  
 PATENT ASSIGNEE(S): Applied Humidity Technologies, USA  
 SOURCE: PCT Int. Appl., 41 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000021580	A1	20000420	WO 1999-US23420	19991006
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6106775	A	20000822	US 1999-405428	19990923
CA 2355687	AA	20000420	CA 1999-2355687	19991006
AU 9962952	A1	20000501	AU 1999-62952	19991006
EP 1119377	A1	20010801	EP 1999-950256	19991006
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002527411	T2	20020827	JP 2000-575552	19991006
PRIORITY APPLN. INFO.:			US 1998-103705P	P 19981009
			US 1999-405428	A 19990923
			WO 1999-US23420	W 19991006

AB Aqueous compns. are formed from combining water, and at least one solute such as **sodium bicarbonate**, acetylsalicylic acid or mixts. of these; the compns. are used to introduce and maintain humidity in the atmospheric. The aqueous compns. can be used to prolong the shelf life of **foods**, including vegetables, fruits, meats, fish, **seafood**, cheeses, other dairy products, cookies, breads, cakes, brown sugar, and tortillas, as well as cut flowers. The aqueous compns. can be applied directly to the **food** or can be applied to evaporation devices. The evaporation devices have a shell with holes and an absorbent material encased in the shell. When the aqueous **composition** has been applied to the evaporation device, the device is placed in a space that **contains** the **food** to be preserved. Thus, the usable life of lettuce can be extended 1-3 days by use of the device. The evaporation device can be recharged by reapplying the aqueous **composition** as needed.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 20 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1998:761794 HCAPLUS  
 DOCUMENT NUMBER: 130:13420  
 TITLE: Pigment/dyestuff **composition**  
 INVENTOR(S): Rydenfors, Goran  
 PATENT ASSIGNEE(S): AB Tripasin, Swed.  
 SOURCE: PCT Int. Appl., 10 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9851160	A1	19981119	WO 1998-SE885	19980514 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ, DE, DE, DK, EE, ES, FI, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
SE 9701828	A	19981116	SE 1997-1828	19970516 <--
SE 508907	C2	19981116		
AU 9875598	A1	19981208	AU 1998-75598	19980514 <--
PRIORITY APPLN. INFO.:			SE 1997-1828	19970516 <--
			WO 1998-SE885	19980514 <--

AB A pigment/dyestuff **composition** for coloring of collagen-containing sausage casings is disclosed. The **composition** comprises 2-10 % by weight of pigment/dyestuff, 3-30 % by weight of polyoxyethylene sorbitan fatty acid ester, 1-10 % by weight of sorbitan fatty acid ester, 0-70 % by weight of dispersing agent, the balance being **water** and, optionally, other conventional additives.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 21 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1997:580666 HCAPLUS

DOCUMENT NUMBER: 127:181148

TITLE: Liquid **compositions** for adrenal cortex function promotion and infection prevention

INVENTOR(S): Sakata, Shigenobu; Tatsumi, Jiro; Fukai, Masaru

PATENT ASSIGNEE(S): Handa, Shigenobu, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.  
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09176029	A2	19970708	JP 1995-354770	19951226
PRIORITY APPLN. INFO.:			JP 1995-354770	19951226

AB Liquid compns. for adrenal cortex function promotion and infection prevention comprise Tilia exts. and substances selected from e.g. iron ammonium citrate, salicylic acid and citric acid. The compns. also can be incorporated into cosmetics or **foods**.

L32 ANSWER 22 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1997:456087 HCAPLUS

DOCUMENT NUMBER: 127:140535

TITLE: Product for alleviating the symptoms of arthritis in mammals

INVENTOR(S): Moore, Eugene R.

PATENT ASSIGNEE(S): USA

SOURCE: U.S., 6 pp., Cont.-in-part of U.S. 5,529,786.  
CODEN: USXXAM

DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 4  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5645851	A	19970708	US 1996-629744	19960409 <--
US 5529786	A	19960625	US 1994-202723	19940228 <--
WO 9737643	A1	19971016	WO 1996-US7423	19960521 <--
W: AT, AU, BR, CA, CH, CZ, DE, DK, ES, FI, GB, JP, MX, NO, NZ, SE				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9660235	A1	19971029	AU 1996-60235	19960521 <--
PRIORITY APPLN. INFO.:			US 1994-202723	19940228 <--
			US 1996-629744	19960409 <--
			WO 1996-US7423	19960521 <--

AB A **composition** useful as an edible supplement for alleviating the symptoms of arthritis for oral consumption by mammals comprise animal tissue **containing water-insol.** Type II collagen, which has been separated from non-Type II **collagen containing** tissue and has been sterilized in subdivided form without changing the original structure of the Type II collagen. Collagen was prepared from chicken cartilage and **soaked** in 3% hydrogen peroxide solution for 20 min for sterilization. A mature, 135 lb female suffering from severe rheumatoid polyarthritis took 0.1 g/day above collagen for the first mo and 0.5 g/day for the remaining 3 mo. The patient was gradually able to reduce the intake of her normal arthritis medicine without ill effect. During this treatment time a general decrease in pain in all joint was also noted.

L32 ANSWER 23 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1997:124867 HCAPLUS  
 DOCUMENT NUMBER: 126:156646  
 TITLE: Collagen sausage casing **containing** encapsulated smoke and **method** of making  
 INVENTOR(S): Stribling, Kenneth V.  
 PATENT ASSIGNEE(S): Devro Plc, UK  
 SOURCE: U.S., 3 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5599570	A	19970204	US 1995-552835	19951103 <--
EP 861033	A1	19980902	EP 1996-935154	19961104 <--
EP 861033	B1	20030129		
R: DE, ES, GB, NL				
ES 2189887	T3	20030716	ES 1996-935154	19961104 <--
US 5716656	A	19980210	US 1996-751294	19961118 <--
PRIORITY APPLN. INFO.:			US 1995-552835	A 19951103 <--
			WO 1996-GB2685	W 19961104 <--

AB A collagen **food** wrapping comprising collagen extruded into a film is disclosed. The **collagen contains** a smoke component which is encapsulated with an encapsulating material which will release the smoke component during curing or cooking prior to consumption. The invention further includes a collagen slurry **containing** an encapsulated **liquid** smoke component and a **method** for



manufacturing a wrapped **food** product by extruding the slurry onto a surface of the **food** product to form such a film.

L32 ANSWER 24 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1994:79824 HCAPLUS  
DOCUMENT NUMBER: 120:79824  
TITLE: Elimination of chrome in solid residues from tanning  
AUTHOR(S): Celma, Pedro; Cabeza, Luisa F.; Ases, Xavi; Cot, James; Manich, Albert  
CORPORATE SOURCE: Inst. Quim. Sarria, Barcelona, Spain  
SOURCE: Afinidad (1993), 50(447), 286-8  
CODEN: AFINAE; ISSN: 0001-9704  
DOCUMENT TYPE: Journal  
LANGUAGE: Spanish

AB A **method** for recovery and recycling of chrome reagent and **collagen** from tanned leather residues is based on treatment with H<sub>2</sub>O<sub>2</sub> in basic medium (formaldehyde as stabilizer, Na<sub>2</sub>SO<sub>4</sub> and CaSO<sub>4</sub>). Oxidation of Cr(III) to Cr(VI) takes place under de-tanning conditions that preserve the fiber content of **collagen**. After oxidation for 45 min at room temperature, the residue is rinsed, filtered, and rinsed/dehydrated with

acetone. The bath **containing** Cr(VI) is treated with NaCl/H<sub>2</sub>SO<sub>4</sub> to reduce Cr(VI) to Cr(III), which can be recovered for tanning or safely disposed of. The elimination of Cr from the residue was  $\leq 98.8\%$ , depending on the amount of H<sub>2</sub>O<sub>2</sub> used. The **collagen** can be used for **feed**, or can be reconstituted and used in pharmaceutical and cosmetic **formulations**.

L32 ANSWER 25 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1993:190482 HCAPLUS  
DOCUMENT NUMBER: 118:190482  
TITLE: The use of fibrous collagen as a texture modifier in **foods**, pharmaceuticals, and cosmetics  
INVENTOR(S): French, James William Leonard  
PATENT ASSIGNEE(S): Stork Fibron B. V., Neth.  
SOURCE: Eur. Pat. Appl., 6 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 532119	A1	19930317	EP 1992-202744	19920909 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
NL 9101520	A	19930401	NL 1991-1520	19910909 <--
JP 06090671	A2	19940405	JP 1992-239421	19920908 <--
PRIORITY APPLN. INFO.:			NL 1991-1520	19910909 <--

AB Fibrous collagen is used to control the consistency and structure of **foods**, pharmaceuticals, and cosmetics. The fibrous collagen fiber is preferably prepared by the **method** of PCT Patent Application PCT/GB91/02289. Preparation of a basis for cosmetic or therapeutical cream from the fibrous collagen fiber, **water**, and lanolin was shown.

L32 ANSWER 26 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1991:150178 HCAPLUS  
DOCUMENT NUMBER: 114:150178  
TITLE: Manufacture of microcapsules from atelocollagen and polyholosides for cosmetic, pharmaceutical or

**food compositions**  
 INVENTOR(S): Levy, Marie Christine; Andry, Marie Christine; Huc, Alain; Buffevant, Chantal  
 PATENT ASSIGNEE(S): Bioetica S. A., Fr.  
 SOURCE: Eur. Pat. Appl., 16 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 381543	A1	19900808	EP 1990-400030	19900105 <--
EP 381543	B1	19930526		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL				
FR 2642329	A1	19900803	FR 1989-1221	19890131 <--
FR 2642329	B1	19910524		
AT 89766	E	19930615	AT 1990-400030	19900105 <--
ES 2058827	T3	19941101	ES 1990-400030	19900105 <--
AU 9048864	A1	19900809	AU 1990-48864	19900129 <--
AU 633866	B2	19930211		
CA 2009065	AA	19900731	CA 1990-2009065	19900131 <--
CA 2009065	C	19990824		
JP 02229111	A2	19900911	JP 1990-21927	19900131 <--
JP 2534921	B2	19960918		
US 5395620	A	19950307	US 1993-74701	19930608 <--
US 5622656	A	19970422	US 1994-328903	19941025 <--
PRIORITY APPLN. INFO.:				
			FR 1989-1221	A 19890131 <--
			US 1989-336711	A 19890412 <--
			EP 1990-400030	A 19900105 <--
			US 1991-749909	B1 19910826 <--
			US 1993-74701	A3 19930608 <--

AB The microcapsules of the invention comprise a mixed wall of crosslinked atelocollagen and polyholosides (e.g. glycosaminoglycans), the proportion of the latter relative to the atelocollagen being preferably 18-50 weight%. The microcapsules can be manufactured either by a process involving interfacial crosslinking or by extrusion of a laminar flow which is broken up by vibrations into individual droplets, which fall in a crosslinking bath. The **atelocollagen-containing** microcapsules are biocompatible and are especially suitable for the manufacture of cosmetic, pharmaceutical, or **food** comps. Manufacture of microcapsules **containing** vitamin C, CD RED 30 pigment, olive oil, salmon oil, or oenothera oil is described.

L32 ANSWER 27 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1989:6649 HCAPLUS

DOCUMENT NUMBER: 110:6649

TITLE: **Composite material for foodstuffs**  
 or for tissue culture and **method** for its preparation

INVENTOR(S): Stol, Miroslav; Adam, Milan; Lukes, Eduard; Jats, Oldrich; Kucera, Frantisek

PATENT ASSIGNEE(S): Czech.

SOURCE: Czech., 15 pp.

CODEN: CZXXA9

DOCUMENT TYPE: Patent

LANGUAGE: Czech

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CS 235857	B1	19850515	CS 1982-9669	19821227 <--
PRIORITY APPLN. INFO.:			CS 1982-9669	19821227 <--

AB Sausage casings were prepared by treating 500 g swollen **collagen containing 7% solids with 665 mL water containing 2.5 g NaOH** to obtain a viscous **liquid containing 3% collagen**. This **liquid** was mixed with a viscose solution **containing 10% cellulose and 7% NaOH**, spread on glass to form a 0.25-0.30 mm film and coagulated with 30 g Na<sub>2</sub>SO<sub>4</sub> in 10 mL concentrated H<sub>2</sub>SO<sub>4</sub>/L. The film was successfully used as a substrate for cultures of embryonal fibroblasts and myoblasts.

L32 ANSWER 28 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1984:173409 HCAPLUS  
 DOCUMENT NUMBER: 100:173409  
 TITLE: Alkaline hydrolyzates of collagen  
 AUTHOR(S): Popernatskii, O. A.; Nosovskii, M. V.  
 CORPORATE SOURCE: Luzhsk. Zavod "Belkozin", USSR  
 SOURCE: Myasnaya Industriya SSSR (1984), (2), 28-31  
 CODEN: MYISAM; ISSN: 0027-5492  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Russian

AB **Collagen-containing** waste materials from the sausage manufacturing industry were hydrolyzed at 0.2 MPa and 130° for 2.5-24 h in the presence of weak alkali, such as Ca(OH)<sub>2</sub> (7.4 or 142 g/L), to obtain (after purification and **drying**) a collagen hydrolyzate for use in animal **feeding**, cosmetics, or the microbiol. industry. Hydrolyzates obtained by 24-h hydrolysis with Ca(OH)<sub>2</sub> at 7.4 g/L or 2.5-h hydrolysis at 142 g Ca(OH)<sub>2</sub>/L had an amino acid **composition** similar to that of collagen. The degree of collagen hydrolysis was more affected by the concentration of Ca(OH)<sub>2</sub> than by the duration of hydrolysis.

L32 ANSWER 29 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1983:214430 HCAPLUS  
 DOCUMENT NUMBER: 98:214430  
 TITLE: A product **containing gelled, hydrolyzed collagen**  
 INVENTOR(S): Shank, Joseph L.  
 PATENT ASSIGNEE(S): Dynagel, Inc., USA  
 SOURCE: Eur. Pat. Appl., 57 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 73908	A1	19830316	EP 1982-106370	19820715
EP 73908	B1	19850313		
R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE				
US 4426443	A	19840117	US 1981-295796	19810827
AT 12064	E	19850315	AT 1982-106370	19820715
AU 8286144	A1	19830303	AU 1982-86144	19820719
AU 554974	B2	19860911		
ZA 8205687	A	19830629	ZA 1982-5687	19820805
CA 1184361	A1	19850326	CA 1982-408879	19820806
US 4528204	A	19850709	US 1984-570250	19840112

## PRIORITY APPLN. INFO.:

US 1981-295796

19810827

EP 1982-106370

19820715

AB An ungelled aqueous concentrate with a gel-set temperature >20° comprising 10-60

weight % hydrolyzed **collagen** and a non-acid lyotropic agent (urea [57-13-6] or CaCl<sub>2</sub>) at a **collagen**-lyotrope ratio of 1:0.1-1:4.5

with a concentrate pH value of .apprx.2.5 to .apprx.7 is prepared The concentrate is

stable at room temperature, readily dilutable, and requires no heating for dilution

The concentrate is suitable for use in **food**, coal dust control, photog. film subbings, and paper sizing. Dilution with water to a hydrolyzed **collagen** concentration of .apprx.2 weight % in the total **composition** while maintaining the concentrate pH, gives a diluted **composition** with a gel-set temperature higher than that of the concentrate Thus, a gelatin

dessert was

prepared by dry blending gelatin-HCl 26.4, urea 18.9, fumaric acid [110-17-8] 4.0, sodium citrate [994-36-5] 1.8, sodium benzoate [532-32-1] 0.05, and K sorbate 0.05 weight %, adding liquid flavoring and coloring and water 42.7 weight %, and heating with agitation at 60° to form a homogeneous concentrate The pH was adjusted by adding NaOH and sweeteners were added. After cooling, the concentrate had a pH of 4.5 and a gel-set temp of 10°. Dilution of 1 vol of concentrate with 10 volume tap water produced a gelatin dessert with gel-set temperature of 13.5°.

L32 ANSWER 30 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1982:525956 HCAPLUS

DOCUMENT NUMBER: 97:125956

TITLE: Production of **feed** flow from **collagen-containing** raw materials

AUTHOR(S): Biktashev, R. U.; Nedzvetskii, V. K.; Filippov, G. S.

CORPORATE SOURCE: Vet. Inst., Kazan, USSR

SOURCE: Nauchnye Trudy Kazanskogo Gosudarstvennogo Veterinarnogo Instituta im. N. E. Baumana (1981), 134, 106-7

CODEN: NTKBDS

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB Tannery wastes, mainly from the flesh side of skins, are hydrolyzed either fermentatively (0.25% complex fermentation preparation added) or by acid (2% HOAc)-alkaline (1% (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>) treatment to produce a meal with improved nutritional characteristics which can be used in livestock **feeds**

. The raw material **contained**: dry substance 23, crude protein 11.9, ash 7.7, NaCl 5, and S 0.13%, and had a pH of 14.0. The meal produced had the following **composition**: dry substance 95, N 8, fat 17, ash 22, total S 0.75-1.06, and NaCl <0.3%.

L32 ANSWER 31 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1978:177002 HCAPLUS

DOCUMENT NUMBER: 88:177002

TITLE: The **composition** of Phenonip and its compatibility with collagen

AUTHOR(S): Riemschneider, R.; Chik, W. H.

CORPORATE SOURCE: Inst. Biochem., Freie Univ. Berlin, Berlin, Fed. Rep. Ger.

SOURCE: Kosmetika (Zurich) (1977), 5(5), 119-26

CODEN: KOSMDX; ISSN: 0377-8304

DOCUMENT TYPE: Journal

LANGUAGE: German

AB 2-(Phenoxy)-ethanol [122-99-6], p-hydroxybenzoic acid Me ester

[99-76-3], p-hydroxybenzoic acid Et ester [120-47-8], p-hydroxybenzoic acid Pr ester [94-13-3], p-hydroxybenzoic acid iso-Bu ester [4247-02-3], and p-hydroxybenzoic acid n-butylester [94-26-8] were identified by gas-liquid chromatog. in Phenonip [8066-38-4]. Phenonip as a preservative did not interfere with standard **methods** used for characterization of collagen solns. A Phenonip-preserved **collagen** contained 33% glycine and 16 other amino acids in various amts., but not cystine.

L32 ANSWER 32 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1971:65069 HCAPLUS  
 DOCUMENT NUMBER: 74:65069  
 TITLE: Synthetic leather **containing** collagen powder  
 INVENTOR(S): Braun, Emil; Kuehn, Joachim  
 PATENT ASSIGNEE(S): Freudenberg, Carl, K.-G.  
 SOURCE: Fr., 14 pp.  
 CODEN: FRXXAK  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 1598778		19700814		
GB 1251829			GB	
			DE	19671227 <--

PRIORITY APPLN. INFO.:

AB A uniformly distributed collagen powder vulcanized on sheets of polyamide fibers (I), latex, poly(vinyl acetate), polyamide-wool, or polyamide-polyester **composites** gave artificial leather with good **water** impermeability. Thus, a powder of 120 mg HCHO/100 g collagen was uniformly distributed (150 g/m<sup>2</sup>) by a transversal **feeder** on a sheet of I. This **composite** was clamped between 2 sheets of wire gauze, **dried**, impregnated in a latex bath, and heated at 50-130° to complete vulcanization. This sheet was coated with polyurethane to give a leather substitute used as a shoe upper which was air- but not **water**-permeable.

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L1      1 SEA FILE=REGISTRY ABB=ON  "SODIUM BICARBONATE"/CN
L2      1 SEA FILE=REGISTRY ABB=ON  SODIUM SULPHATE/CN
L3      1 SEA FILE=REGISTRY ABB=ON  AMMONIUM CHLORIDE/CN
L4      1 SEA FILE=REGISTRY ABB=ON  CALCIUM CHLORIDE/CN
L5      0 SEA FILE=REGISTRY ABB=ON  SODIUM HYDROGEN PHOSPHATE/CN
L6      2 SEA FILE=REGISTRY ABB=ON  ("SODIUM HYDROGEN PHOSPHATE (NA2H2P2O
7)"/CN OR "SODIUM HYDROGEN PHOSPHATE (NAH2PO4)"/CN)
L7      4 SEA FILE=REGISTRY ABB=ON  ("POTASSIUM HYDROGEN PHOSPHATE
(K2H2P2O7)"/CN OR "POTASSIUM HYDROGEN PHOSPHATE (K2HPO4)"/CN
OR "POTASSIUM HYDROGEN PHOSPHATE (K3HP2O7)"/CN OR "POTASSIUM
HYDROGEN PHOSPHATE (KH2PO4)"/CN)
L8      1 SEA FILE=REGISTRY ABB=ON  "POTASSIUM CHLORIDE"/CN
L9      1 SEA FILE=REGISTRY ABB=ON  "AMMONIUM SULPHATE"/CN
L10     995 SEA FILE=HCAPLUS ABB=ON  ?COLLAGEN?(W) (?CASING? OR ?CONTAIN?)
L11     62 SEA FILE=HCAPLUS ABB=ON  L10 AND (?FOOD? OR ?FEED?)
L12     1 SEA FILE=HCAPLUS ABB=ON  L11 AND (?CLIP?(3A) (?STRENGTH? OR
?STRONG?) OR ?THICK?)
L13     3 SEA FILE=HCAPLUS ABB=ON  L11 AND (?COOK? OR ?BAKE? OR ?BOIL?
OR ?BROIL?) (L) (?RESIST? OR ?LESS? OR ?RESTRICT? OR ?BARRIER?)
L14     37 SEA FILE=HCAPLUS ABB=ON  L11 AND (?SOAK? OR DRY? OR ?DRIED? OR
?AQUEOUS? OR ?WATER? OR ?LIQUID?)
L15     37 SEA FILE=HCAPLUS ABB=ON  L12 OR L13 OR L14
L16     37 SEA FILE=HCAPLUS ABB=ON  L15 AND (?PACK? OR ?CONTAIN? OR
?HOLD? OR ?SECURE?)
L17     4 SEA FILE=HCAPLUS ABB=ON  L15 AND (?PACK? OR ?HOLD?)
L18     37 SEA FILE=HCAPLUS ABB=ON  L16 OR L17
L19     12 SEA FILE=HCAPLUS ABB=ON  L18 AND (?COMPOSIT? OR ?FORMULAT?)
L20     7 SEA FILE=HCAPLUS ABB=ON  L18 AND (?METHOD? OR ?TECHNIQ?)
L21     37 SEA FILE=HCAPLUS ABB=ON  L18 OR L19 OR L20
L22     33 SEA FILE=HCAPLUS ABB=ON  L21 AND (PD<20021115 OR PRD<20021115)
L24     1032 SEA FILE=HCAPLUS ABB=ON  ?COLLAGEN? AND (L1 OR L2 OR L3 OR L4
OR L5 OR L6 OR L7 OR L8 OR L9 OR (?SODIUM? OR NA) (W) (?BICARBONA
T? OR ?SULPHAT? OR ?SULFAT?) OR (?AMMONIUM? OR NH4 OR ?CALCIUM?
OR CA OR ?POTASSIUM?) (W) (?CHLORIDE? OR CL) OR (?SODIUM? OR NA
OR ?POTASSIUM?) (W) (?HYDROGEN?) (W) (?PHOSPHAT?))
L25     564 SEA FILE=HCAPLUS ABB=ON  L24 AND (?CASING? OR ?CONTAIN?)
L26     27 SEA FILE=HCAPLUS ABB=ON  L25 AND (?FOOD? OR ?FEED?)
L27     1 SEA FILE=HCAPLUS ABB=ON  L26 AND (?CLIP?(3A) (?STRENGTH? OR
?STRONG?) OR ?THICK?)
L30     60 SEA FILE=HCAPLUS ABB=ON  L22 OR L26 OR L27
L32     32 SEA FILE=HCAPLUS ABB=ON  L30 AND (?COMPOSIT? OR ?FORMULAT? OR
?METHOD? OR ?TECHNIQ?)
L33     4 SEA L32
L34     4 DUP REMOV L33 (0 DUPLICATES REMOVED)

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L34  ANSWER 1 OF 4      MEDLINE on STN
ACCESSION NUMBER:      96426976      MEDLINE
DOCUMENT NUMBER:       PubMed ID: 8829239
TITLE:                 Textural, color, and sensory properties of bologna
                        containing various levels of washed chicken skin.
AUTHOR:                Bonifer L J; Froning G W; Mandigo R W; Cuppett S L; Meagher
                        M M
CORPORATE SOURCE:      Department of Food Science and Technology, University of
                        Nebraska, Lincoln 68583-0919, USA.
SOURCE:                Poultry science, (1996 Aug) 75 (8) 1047-55.
                        Journal code: 0401150. ISSN: 0032-5791.
PUB. COUNTRY:          United States

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DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
 LANGUAGE: English  
 FILE SEGMENT: Priority Journals  
 ENTRY MONTH: 199612  
 ENTRY DATE: Entered STN: 19970128  
 Last Updated on STN: 19970128  
 Entered Medline: 19961217

AB Poultry skin was washed in **sodium bicarbonate** (0.5%) solution in a pilot plant facility to remove fat from skin. **Composition** of the washed product was determined and its functional properties were determined in a bologna product at the levels of 0, 10, and 20%. Washing reduced fat, and increased total protein and moisture in skin. **Collagen** content was significantly increased and water- and salt-soluble protein in washed skin were significantly decreased compared to unwashed skin ( $P < 0.05$ ). With reference to emulsion stability, skin content did not affect fat or gel-water losses and lowered solids loss when compared to bologna with 0% skin ( $P < 0.05$ ). Kramer Shear peak force was not significantly different for bologna at each treatment level. Total energy was higher for bologna with 0% skin ( $P < 0.05$ ). Skin addition did not affect compression measurements of hardness, springiness, cohesiveness, and chewiness when compared to bologna with 0% skin. The addition of skin resulted in a lighter (L), less red (aL), and less yellow (bL) product according to HunterLab color analysis ( $P < 0.05$ ). Consumer panelists rated bologna with 10% skin highest in texture, flavor, and texture and appearance acceptability ( $P < 0.05$ ). Washed chicken skin may have potential as a low cost, low fat ingredient for emulsified meat products.

L34 ANSWER 2 OF 4 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED.  
 on STN

ACCESSION NUMBER: 91268238 EMBASE  
 DOCUMENT NUMBER: 1991268238  
 TITLE: Dietary fat modifies thromboxane A2-induced stimulation of rat platelets.  
 AUTHOR: Heemskerk J.W.M.; Feijge M.A.H.; Kester A.; Hornstra G.  
 CORPORATE SOURCE: Department of Biochemistry, Biomedical Center, University of Limburg, P.O. Box 616, 6200 MD Maastricht, Netherlands  
 SOURCE: Biochemical Journal, (1991) 278/2 (399-404).  
 ISSN: 0264-6021 CODEN: BIJOAK  
 COUNTRY: United Kingdom  
 DOCUMENT TYPE: Journal; Article  
 FILE SEGMENT: 025 Hematology  
 029 Clinical Biochemistry  
 LANGUAGE: English  
 SUMMARY LANGUAGE: English

AB Diets **containing** high levels of monounsaturated, n-6 polyunsaturated and n-3 polyunsaturated fatty acids were fed to Wistar rats. This resulted in decreases in the arachidonate content in platelet phospholipids to 91%, 79% and 51% respectively of the level found after **feeding** a diet rich in saturated fatty acids. In the presence of  $\text{CaCl}_2$ , **collagen**- and thrombin-induced aggregation of washed platelets from the saturated-fat dietary group (with highest level of arachidonate) was low compared with that of platelets from the other dietary groups, despite a relatively high production of thromboxane B2. On the other hand, n-3 polyunsaturated fatty acids in the diet resulted in platelets aggregating actively, but producing low levels of levels of thromboxane B2. When indomethacin-treated rat platelets were activated with the thromboxane A2 analogue U46619, the presence of a second agonist such as **collagen**, ADP or thrombin was necessary for aggregate formation. U46619-induced aggregation in combination with either

co-activator was relatively low in arachidonate-rich platelets, and was higher in platelets with a low arachidonate content. Similarly, phospholipase C-catalysed formation of L-myo-inositol phosphates was higher in platelets with a low arachidonate content. We conclude that the ability of platelets to react with thromboxane A2 is modified by diet in such a way that a decreased substrate-limited generation of thromboxane A2 is compensated for by an increased response to thromboxane, and vice versa. No significant differences were detected in the binding of U46619 or SQ29548 to platelets from the various dietary groups. Therefore the changed response seems not to be caused by modified properties of the thromboxane A2/prostaglandin H2 receptors, but by altered transduction of the thromboxane signal.

L34 ANSWER 3 OF 4 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED.  
on STN

ACCESSION NUMBER: 77137904 EMBASE  
DOCUMENT NUMBER: 1977137904  
TITLE: Effect of different levels of methionine and sulfate on  
**collagen** metabolism and growth of young pigs.  
AUTHOR: Robel E.J.  
CORPORATE SOURCE: Non Ruminant Anim. Nutrit. Lab., Nutrit. Inst., US Dept.  
Agric., Beltsville, Md. 20705, United States  
SOURCE: Nutrition Reports International, (1976) 14/2 (147-154).  
CODEN: NURIBL  
DOCUMENT TYPE: Journal  
FILE SEGMENT: 029 Clinical Biochemistry  
005 General Pathology and Pathological Anatomy  
LANGUAGE: English

AB The sparing effect of sulfate sulfur on dietary methionine was investigated in relation to **collagen** metabolism and body weight gains with weaned pigs 2 wk of age. The diets for the various treatments **contained** crystalline amino acids and a sulfate free mineral mixture. The basal diet **contained** 0.8% L methionine. **Sodium sulfate** was added to methionine limiting diets in amounts to make the combination of methionine and **sodium sulfate** equal to 0.8%. The methionine limiting diets **contained** 0.6, 0.4, 0.2 and 0.0% of L methionine. The pigs were allowed the diets and deionized water ad libitum for 3 wk. When **sodium sulfate** replaced up to 50% of the dietary methionine level of the basal diet, body weight gains, **feed** utilization, neutral salt soluble **collagen** levels or total **collagen** levels of pig tendon tissue did not differ ( $P < 0.01$ ) from those of pigs fed the basal. Differences ( $P < 0.01$ ) between pigs fed the basal **containing** 0.8% **sodium sulfate** and those fed the basal without **sodium sulfate** were not observed for the parameters studied.

L34 ANSWER 4 OF 4 JAPIO (C) 2004 JPO on STN  
ACCESSION NUMBER: 2004-159656 JAPIO  
TITLE: STARCH/**COLLAGEN** CASING FOR  
CO-EXTRUDED **FOOD** PRODUCT  
INVENTOR: JOLY GHISLAINE; KASICA JAMES J; O'MARA ROBERT; SHARIFF  
ROXANNA  
PATENT ASSIGNEE(S): NATL STARCH & CHEM INVESTMENT HOLDING CORP  
PATENT INFORMATION:

PATENT NO	KIND	DATE	ERA	MAIN IPC
JP 2004159656	A	20040610	Heisei	A22C013-00



## APPLICATION INFORMATION

STN FORMAT: JP 2003-372091 20031031  
ORIGINAL: JP2003372091 Heisei  
PRIORITY APPLN. INFO.: US 2002-291888 20021108  
SOURCE: PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined  
Applications, Vol. 2004

AN 2004-159656 JAPIO

AB PROBLEM TO BE SOLVED: To provide **composites** or combinations of selected starches and collagen imparting very useful casing materials for co-extruded **food** products such as sausage.  
SOLUTION: The casing material includes collagen and starches. Wherein the starch is a gel forming, non-degraded, amylose **containing** dispersed starch, or a gel forming, non-degraded, chemically crosslinked or physically inhibited amylopectin dispersed starch. The starch is characterized by a G' of 600 Pa or greater at a frequency of 0.1 rad/sec at 25 &deg;C prepared at a solid concentration of 10 weight %, the amount of starch to collagen being from about 0.05:1 to 10:1 parts by weight on a **dry** basis.  
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FILE 'REGISTRY' ENTERED AT 14:31:39 ON 31 OCT 2004

E COLLAGEN/CN  
E SODIUM BICARBONATE/CN

L1 1 SEA ABB=ON "SODIUM BICARBONATE"/CN  
L2 1 SEA ABB=ON SODIUM SULPHATE/CN  
L3 1 SEA ABB=ON AMMONIUM CHLORIDE/CN  
L4 1 SEA ABB=ON CALCIUM CHLORIDE/CN  
L5 0 SEA ABB=ON SODIUM HYDROGEN PHOSPHATE/CN  
E SODIUM HYDROGEN PHOSPHATE/CN  
L6 2 SEA ABB=ON ("SODIUM HYDROGEN PHOSPHATE (NA2H2P2O7)"/CN OR  
"SODIUM HYDROGEN PHOSPHATE (NAH2PO4)"/CN)  
E POTASSIUM HYDROGEN PHOSPHATE/CN  
L7 4 SEA ABB=ON ("POTASSIUM HYDROGEN PHOSPHATE (K2H2P2O7)"/CN OR  
"POTASSIUM HYDROGEN PHOSPHATE (K2HPO4)"/CN OR "POTASSIUM  
HYDROGEN PHOSPHATE (K3HP2O7)"/CN OR "POTASSIUM HYDROGEN  
PHOSPHATE (KH2PO4)"/CN)  
E POTASSIUM CHLORIDE/CN  
L8 1 SEA ABB=ON "POTASSIUM CHLORIDE"/CN  
E AMMONIUM SULPHATE/CN  
L9 1 SEA ABB=ON "AMMONIUM SULPHATE"/CN

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L10 995 SEA ABB=ON ?COLLAGEN? (W) (?CASING? OR ?CONTAIN?)  
L11 62 SEA ABB=ON L10 AND (?FOOD? OR ?FEED?)  
L12 1 SEA ABB=ON L11 AND (?CLIP?(3A) (?STRENGTH? OR ?STRONG?) OR  
?THICK?)  
L13 3 SEA ABB=ON L11 AND (?COOK? OR ?BAKE? OR ?BOIL? OR ?BROIL?) (L) (  
?RESIST? OR ?LESS? OR ?RESTRICT? OR ?BARRIER?)  
L14 37 SEA ABB=ON L11 AND (?SOAK? OR DRY? OR ?DRIED? OR ?AQUEOUS? OR  
?WATER? OR ?LIQUID?)  
L15 37 SEA ABB=ON L12 OR L13 OR L14  
L16 37 SEA ABB=ON L15 AND (?PACK? OR ?CONTAIN? OR ?HOLD? OR ?SECURE?)  
L17 4 SEA ABB=ON L15 AND (?PACK? OR ?HOLD?)  
L18 37 SEA ABB=ON L16 OR L17  
L19 12 SEA ABB=ON L18 AND (?COMPOSIT? OR ?FORMULAT?)  
L20 7 SEA ABB=ON L18 AND (?METHOD? OR ?TECHNIQ?)  
L21 37 SEA ABB=ON L18 OR L19 OR L20  
L22 33 SEA ABB=ON L21 AND (PD<20021115 OR PRD<20021115)  
L23 0 SEA ABB=ON L22 AND (L1 OR L2 OR L3 OR L4 OR L5 OR L6 OR L7 OR  
L8 OR L9 OR (?SODIUM? OR NA) (W) (?BICARBONAT? OR ?SULPHAT? OR  
?SULFAT?) OR (?AMMONIUM? OR NH4 OR ?CALCIUM? OR CA OR ?POTASSIU  
M?) (W) (?CHLORIDE? OR CL) OR (?SODIUM? OR NA OR ?POTASSIUM?) (W) (  
?HYDROGEN?) (W) (?PHOSPHAT?))  
L24 1032 SEA ABB=ON ?COLLAGEN? AND (L1 OR L2 OR L3 OR L4 OR L5 OR L6  
OR L7 OR L8 OR L9 OR (?SODIUM? OR NA) (W) (?BICARBONAT? OR  
?SULPHAT? OR ?SULFAT?) OR (?AMMONIUM? OR NH4 OR ?CALCIUM? OR  
CA OR ?POTASSIUM?) (W) (?CHLORIDE? OR CL) OR (?SODIUM? OR NA OR  
?POTASSIUM?) (W) (?HYDROGEN?) (W) (?PHOSPHAT?))  
L25 564 SEA ABB=ON L24 AND (?CASING? OR ?CONTAIN?)  
L26 27 SEA ABB=ON L25 AND (?FOOD? OR ?FEED?)  
L27 1 SEA ABB=ON L26 AND (?CLIP?(3A) (?STRENGTH? OR ?STRONG?) OR  
?THICK?)  
L28 0 SEA ABB=ON L27 AND (?COOK? OR ?BAKE? OR ?BOIL? OR ?BROIL?) (L) (  
?RESIST? OR ?LESS? OR ?RESTRICT? OR ?BARRIER?)  
L29 0 SEA ABB=ON L28 AND (?SOAK? OR DRY? OR ?DRIED? OR ?AQUEOUS? OR  
?WATER? OR ?LIQUID?)  
L30 60 SEA ABB=ON L22 OR L26 OR L27  
L31 4 SEA ABB=ON L30 AND (?PACK? OR ?HOLD?)

L32 32 SEA ABB=ON L30 AND (?COMPOSIT? OR ?FORMULAT? OR ?METHOD? OR  
?TECHNIQ?) *32 citz from OA Plus*

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L33 4 SEA ABB=ON L32

L34 4 DUP REMOV L33 (0 DUPLICATES REMOVED)

*4 citz from other  
databases*